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2617

DATE MAILED: 08/22/2008

## NOTICE OF ALLOWANCE AND FEE(S) DUE

24587 7590 08/22/2008

ALCATEL LUCENT INTELLECTUAL PROPERTY & STANDARDS 3400 W. PLANO PARKWAY, MS LEGL2 PLANO. TX 75075

EXAMINER					
NGUYEN, HUY D					
ART UNIT	PAPER NUMBER				

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFERMATION NO.

 10/511,863
 07/29/2005
 Ghussan Naim
 13936GWOUS
 6382

TITLE OF INVENTION: METHOD AND SYSTEM FOR PROVIDING AUTHENTICATION OF A MOBILE TERMINAL IN A HYBRID NETWORK FOR DATA AND VOICE SERVICES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/24/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1313 AND MPEP 1508.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includired below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees wil spondence address; a	I be mailed to the current and/or (b) indicating a se	nt correspondence address as parate "FEE ADDRESS" for
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PLANO, IA /30	113					(Depositor's name)
			<u> </u>			(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	/	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,863 TITLE OF INVENTION FOR DATA AND VOIC		TEM FOR PROVIDING	Ghassan Naim i AUTHENTICATION OI	FA MOBILE TERM	139366WOUS MINAL IN A HYBRID !	6382 NETWORK
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nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/24/2008
EXAM	INER	ART UNIT	CLASS-SUBCLASS	]		
NGUYEN	, HUY D	2617	370-352000	•		
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON 2	2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a singl registered attorney or a 2 registered attorney or a 2 registered patern atto listed, no name will be THE PATENT (print or type data will appear on the p T a substitute for filing an	3 registered patent vely, e firm (having as a nagent) and the names rneys or agents. If no printed,	of up to o name is 3	document has been filed for
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Advance Order -	o small entity discount p	permitted)	<ul> <li>Payment of Fee(s): (Plea</li> <li>A check is enclosed.</li> <li>Payment by credit car</li> <li>The Director is hereby overpayment, to Depo</li> </ul>	d. Form PTO-2038 i	s attached.	e shown above) deficiency, or credit any an extra copy of this form).
<ol> <li>Change in Entity States</li> <li>a. Applicant claim</li> </ol>	tus (from status indicated s SMALL ENTITY statu		☐ b. Applicant is no lon	ger claiming SMALI	ENTITY status. Sec 37	CFR 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regist	ered attorney or agent; or	the assignee or other party in
Authorized Signature				Date		
Typed or printed name				Registration No		
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR 6	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 mi idual case. Any com er, U.S. Patent and Ti D THIS ADDRESS.	public which is to file (a nutes to complete, includ ments on the amount of rademark Office, U.S. De SEND TO: Commissione	nd by the USPTO to process) ing gathering, preparing, and time you require to complete partment of Commerce, P.O. r for Patents, P.O. Box 1450,

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ALCATEL L	UCENT		NGUYEN	K, HUY D		
INTELLECTUAL PROPERTY & STANDARDS				ART UNIT	PAPER NUMBER	
3400 W. PLANO PARKWAY, MS LEGL2 PLANO TX 75075				2617		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 425 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 425 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/511.863 NAIM ET AL. Notice of Allowability Examiner Art Unit HUY D. NGUYEN 2617 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 5/22/2008. The allowed claim(s) is/are 3-13,16 and 17. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance

of Biological Material

9. ☐ Other .

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Art Unit: 2617

## EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or
additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the
payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Raffi Gostanian on 8/13/2008.

The application has been amended as follows:

Claim 13, line 4: after "receiving", "parameters" has been deleted; — a signature response, a random number, and a ciphering key — has been inserted.

Claim 13, line 4: after "comparing", "a" has been deleted; -- the -- has been inserted.

Claim 13, line 5: before "international", "the" has been deleted; -- an -- has been inserted.

Claim 13, line 5: before "random number", "a" has been deleted; -- the -- has been inserted.

Claim 13, line 6: before "ciphering key", "a" has been deleted; — the -- has been inserted.

Claims 14 and 15 have been canceled.

- The following is an examiner's statement of reasons for allowance:
- Claims 3-13, 16-17 are allowed. The following is an examiner's statement of reasons for allowance:
- Claims 3-12, 16-17 were previously allowed.

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5. Regarding claim 13, Berkowitz et al. teaches a method for providing authentication of a mobile terminal in a hybrid wireless network (e.g., the hybrid public/private wireless network 100 – see fig. 1 and col. 4, lines 32-45) wireless network having at least one radio access network based on a first technology and a core network based on a second technology (see col. 6, lines 2-18), the method comprising: sending an initiating authentication message to a mobile unit (e.g., sending an authentication request to the ATC who in turn forwards the response to NIU.sub.B.- see col. 6, lines 16-18).

Perkins et al. teaches receiving parameters (e.g., set of quintuplets – see paragraph 0039) in a message compatible with a first technology, comparing a signature response using an international mobile identity number (e.g., AAAH 320 authenticates the signature by comparing the identity of MN 335 to the signature received – see paragraph 0039), a random number (e.g., RAND included in the authentication vector – see paragraph 0041), and a ciphering key (e.g., CK included in the authentication vector – see paragraph 0041).

However, the cited prior arts, either alone or in combination, fail to teach sending the signature response, the random value, the ciphering key in a form compatible with the second technology, receiving an authentication indication in a message compatible with the second technology, in combination with all of other limitations in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

## Contact information

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY D. NGUYEN whose telephone number is (571)272-7845.
 The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huy D Nguyen/ Examiner, Art Unit 2617

/Dwayne D. Bost/ Supervisory Patent Examiner, Art Unit 2617